

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008664**Date Inspected:** 26-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG023A-030. The welder is identified as #049769 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG023C-026. The welder is identified as #05841 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-TC-U2-F for WR7051.

Segment 5BW/5CW

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-013. The welder is identified as #037743 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-U2-FCM.

This QA Inspector observed back gouging of the root pass of the deck plate to edge plate splice on the counter weight side corner assembly.

### Segment 1AW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD34-PP8.5-065, 067. The welder is identified as #202841 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-TC-U2-F for CWR 667.

### Segment 3AW

This QA Inspector observed blasting in progress on the external portion of the FL3 floor beams.

This QA Inspector observed the removal of high strength bolts from the chevron brace lower splice plate to install shim; new bolts were observed being installed after placement of shim at panel point 19.

### Segment 1BW

This QA Inspector observed grinding of hold back welds on the deck plate and side plate I-ribs along the 1BW/2AW transverse splice location.

### Segment 2AW

This QA Inspector observed grinding on the ends of the cross beam side plate stiffener plates along the 1BW/2AW bolted splice location.

### Segment 1AW/1BW

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) of the deck plate transverse CJP splice weld, scanning was being performed for transverse indications.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang and Feng Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Hernandez,Dan
----------------------	---------------

Quality Assurance Inspector
-----------------------------

---

<b>Reviewed By:</b>	Carreon,Albert
---------------------	----------------

QA Reviewer
-------------